

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of  
**DeRosier et al.**

Serial No.: **09/945,096**

Filed: **August 31, 2001**

For: **System and Method for Sociometric Data  
Collection and Analysis**

Docket No: **4846-001**

PATENT PENDING

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October 18, 2006

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Season E. Munck

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**RULE 1.131 DECLARATION OF DR. DEROSIER**

I, Dr. Melissa E. DeRosier, hereby declare as follows:

1. I am the inventor of the invention disclosed and claimed in U.S. Patent Application Serial No. 09/945,096, filed August 31, 2001.

2. Sociometry may be defined as the quantitative study of interpersonal relationships in populations, especially the study and measurement of preferences. One form of sociometric data collection to generate a questionnaire for a target group, asking sociometric questions and providing a plurality of potential nominations as answers to the questions, the nominations corresponding to individuals in the group. The sociometric questions may ask users to select nominations for categories or descriptions, such as Liked Most, Liked Least, Is Aggressive, Is Picked On, and the like. When properly analyzed, these questionnaires may reveal otherwise hidden interpersonal relationships and social status within the group, identifying individuals who

may benefit from counseling or intervention by psychiatric professionals. One form of sociometric analysis of such data is a form of statistical analysis, where individuals' nominations by others in the group are normalized and plotted along various axes, such as most and least liked.

3. At least as early as November 1999, I became aware of the need for sociometric analysis in identifying at-risk schoolchildren and facilitating intervention in the classroom environment by mental health professionals. At this time, I conceived the idea that a software program executing on a digital computer could automate and simplify many of the tasks involved in conducting a sociometric survey and analysis of a group of schoolchildren. From at least as early as November 1999, I directed and oversaw the development of the software – known as 3-C SCAN – that implements my invention. Work in the 3-C SCAN software proceeded over most of early 2000. While I cannot state with absolute certainty the specific date on which each claimed limitation was conceived, the broad ideas were conceived as early as November 1999, and all of the details were conceived and added to the program, resulting in a working pre-release version that incorporated all claimed functionality by the end of August, 2000. Coding for version 1.0 of the 3-C SCAN program, the first releasable version that included additional data interlocks and user interface features (not claimed), was complete by October 11, 2000.

4. In particular, at least prior to August 2000, I conceived that the program could create a sociometric questionnaire including a plurality of sociometric questions related to social status and/or social relationships, each sociometric question including a plurality of potential nominations corresponding to the schoolchildren in the group, and that each sociometric question may solicit at least one nomination from the plurality of potential nominations. I conceived that the program could accept the responses to the sociometric questionnaire and analyze the responses to generate a sociometric analysis of social status and/or social relationships. The computer program could then output results of the sociometric analysis in a

variety of useful ways. I conceived that a user could utilize the computer program to generate the sociometric questionnaire by selecting from among predetermined questions displayed by the program, and that the program would accept the user's selections and generate the sociometric questionnaire containing only the selected questions. I determined at that time that two useful designations for the nominations would be Liked Most and Liked Least. I conceived that other useful designations may include Is Aggressive, Is Picked On, Is Teased, Is Weird, Is a Friend, and Is a Best Friend. I further conceived of dividing the group of schoolchildren into subgroups, entering schoolchildren's names by subgroup, identifying the schoolchildren by some identifier other than their names, and sorting the schoolchildren within each subgroup by first name for ease of use.

5. As early as November 1999 and prior to August 2000, I was aware that the display and data processing capability of digital computers could assist in the tedious tasks of questionnaire results entry and error checking. In particular, I conceived at that time that the program could display a replica of the sociometric questionnaire on a computer screen, including the potential nominations associated with each said question. As a user designated one or more of the displayed nominations, the program could indicate the selected nominations on the replica, displaying an identical questionnaire, wherein error may be readily observed. I conceived that accuracy may be improved by the program repeating this process, and comparing the data input originally to that input during the repeated entry. I conceived that the program could flag and correct errors thus detected.

6. As early as November 1999 and prior to August 2000, I was aware that the numerical data processing power of digital computers could perform the statistical analysis required for sociometric analysis. I corroborated with co-inventor Jim Thomas regarding such analysis – in particular, statistically classifying students according to their nominations for Most Liked and Least Liked, generating strength and reliability metrics regarding each schoolchild's classification into sociometric classifications, and identifying self-nominations.

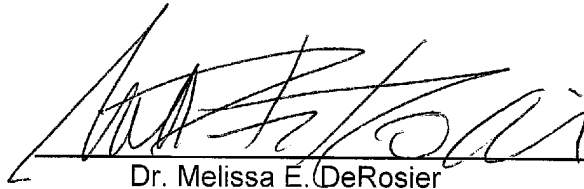
7. At least as early as November 1999, I was aware that graphic representation of sociometric data could dramatically aid understanding of the underlying interpersonal relationships and social status with an analyzed group. In particular, as early as November 1999 and prior to August 2000, I conceived that a computer program could generate a scatterplot diagram having coordinate axes indicating sociometric values, and plot points representing schoolchildren on the diagram in spatial relation to the results of a sociometric analysis. I conceived that the program could highlighted subgroups of schoolchildren in a scatterplot diagram of a larger group of schoolchildren. I conceived that a tool such as a slider bar diagram for one or more sociometric questions may indicate the range of responses to the sociometric question by the linear extent of the slider bar. I further conceived that an indicator may locate one or more schoolchildren along the slider bar in spatial proportion to the schoolchild's ranking in the group with respect to that sociometric question.

8. At least as early as November 1999, I conceived of a system including an input device, display, and computer processor(s) programmed to implement and perform the above inventive ideas. I further conceived that the computer-assisted method of sociometric survey and analysis could be implemented in a computer program, that could be stored on a computer-readable medium, allowing the program to be distributed to, and used in, a large number of schools.

9. The invention claimed in U.S. Patent Application Serial No. 09/945,096, of which I am a named co-inventor, was conceived as early as November 2000 and prior to August 2000 and pursued with diligence until its reduction to practice with a fully functional, pre-release version in August 2000. Coding for a releasable version of the software containing further user interface enhancements was created by October 11, 2000.

I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

10-18-06  
Date

  
Dr. Melissa E. DeRosier